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IN THE CLAIMS:

1. (Previously Presented) A concentrate adapted to be diluted with a biodegradable diluent polymer to produce a corrosion inhibiting composition effective to protect a ferrous metal surface against corrosion in a molecular-oxygen containing atmosphere containing in the range from 1 to 100 ppm of an acid gas at a relative humidity of 90% and 37.4°C (100°F), when the ferrous metal surface is exposed in generally spaced apart relationship with the composition in a sealed environment, the concentrate comprising a substantially non-hydrolyzable synthetic resinous polymer that is biodegradable having dispersed therein from 10 to about 40 parts of an interceptor comprising an alkali metal silicate, or zinc oxide, or both, from 10 to 40 parts of sodium nitrite, and from 10 to 40 parts of-a 2,4,6-tri substituted phenol, in combination with an adjuvant present in less than 5 parts, provided that the resinous polymer has a water vapor transmission rate (WVTR) at least as high as that of low density polyethylene and is present in an amount of at least 40 parts in 100 parts of the concentrate.

2. (Previously Presented) The concentrate of claim 1, wherein said alkali metal silicate is sodium silicate, and wherein said concentrate biodegradable polymer comprises star ε-caprolactone, ε-caprolactone (PCL); poly(hydroxybutyrate-co-valerate) (PHBV); uncoated- or nitrocellulose-coated cellophane film; crosslinked chitosan; starch/ethylene vinyl alcohol (St/VOH) blend film; pure ethylene vinyl alcohol film; or polycaprolactone (PCL).

3 (Previously Presented) The concentrate of claim 2, wherein said diluent biodegradable polymer comprises star ε-caprolactone, ε-caprolactone (ε-PCL); poly(hydroxybutyrate-co-valerate) (PHBV); uncoated- or nitrocellulose-coated cellophane film; crosslinked chitosan; starch/ethylene vinyl alcohol (St/VOH) blend film; pure ethylene vinyl alcohol film; or polycaprolactone (PCL).

4. (Previously Presented) The concentrate of claim 3, wherein the 2,4,6-tri-substituted phenol comprises 2,6-di-t-butyl-4-methylphenol; 2,2'-methylene-bis(4-methyl-6-t-butylphenol); 1,3,5-tri(3',5'-di-t-butyl-4'-hydroxybenzyl)-2,4,6-trimethylbenzene; tris((3-(3',5'-di-t-butyl-4'hydroxybenzyl)-2'acetoxyethyl))isocyanurate; or, pentaerythrityl-tetrakis(3,5-di-t-butyl-4-hydroxyphenylpropionate), or a combination thereof.

5. (Previously Presented) The concentrate of claim 4, wherein the adjuvant comprises fumed silica or calcium carbonate.

6. (Previously Presented) The concentrate of claim 2, wherein the interceptor and the sodium nitrite have a primary particle size, independently, in the range from about 1 to 53 microns and are substantially homogeneously dispersed in the polymer.

7. - 15. (Cancelled).

16. (Previously Presented) The concentrate of claim 1, wherein the particle size of said alkali metal silicate or said zinc oxide, independently, is from 1 to 45 microns, wherein the particle size of said sodium nitrite is from 1 to 45 microns.

17. (Previously Presented) The concentrate of claim 3, wherein the particle size of said alkali metal silicate or said zinc oxide, independently, is from 1 to 45 microns, wherein the particle size of said sodium nitrite is from 1 to 45 microns.

18. (Previously Presented) The concentrate of claim 5, wherein the particle size of said alkali metal silicate or said zinc oxide, independently, is from 1 to 45 microns, wherein the particle size of said sodium nitrite is from 1 to 45 microns, and wherein the particle size of said fumed silica or calcium carbonate is less than 1 micron.

19. (Previously Presented) A composition, comprising the concentrate of claim 1, and said biodegradable diluent polymer, said composition comprising:

from 0.01% to 2% by weight of each of said alkali metal silicate, or said zinc oxide, or both;

from 0.01 % to 2% by weight of said sodium nitrite; and

from 0.01% to 2% by weight of said trisubstituted phenol.

20. (Previously Presented) A composition, comprising the concentrate of claim 3, and said biodegradable diluent polymer, said composition comprising:

from 0.01% to 2% by weight of each of said alkali metal silicate, or said zinc oxide, or both;

from 0.01 % to 2% by weight of said sodium nitrite; and

from 0.01% to 2% by weight of said trisubstituted phenol.

21. (Previously Presented) A composition, comprising the concentrate of claim 16, and said biodegradable diluent polymer, said composition comprising

from 0.01% to 2% by weight of each of said alkali metal silicate, or said zinc oxide, or both;

from 0.01 % to 2% by weight of said sodium nitrite; and

from 0.01% to 2% by weight of said trisubstituted phenol.

22. (Previously Presented) A composition, comprising the concentrate of claim 18, and said biodegradable diluent polymer, said composition comprising

from 0.01% to 2% by weight of each of said alkali metal silicate or said zinc oxide or both;

from 0.01 % to 2% by weight of said sodium nitrite;

from 0.01% to 2% by weight of said trisubstituted phenol; and

from about 0.01% to 1% by weight of said fumed silica or said calcium carbonate.

23. - 24. (Cancelled).

25. (Previously Presented) The concentrate of claim 2, wherein the 2,4,6-tri-substituted phenol comprises 2,6-di-t-butyl-4-methylphenol; 2,2'-methylene-bis(4-methyl-6-t-butylphenol); 1,3,5-tri(3',5'-di-t-butyl-4'-hydroxybenzyl)-2,4,6-trimethylbenzene; tris((3-(3',5'-di-t-butyl-4'hydroxybenzyl)-2'acetoxyethyl))isocyanurate; or,
pentaerythrityl-tetrakis(3,5-di-t-butyl-4hydroxyphenylpropionate), or combinations thereof, and
wherein the adjuvant comprises fumed silica and calcium carbonate.

26. (Currently Amended) A corrosion inhibiting composition effective to protect a ferrous metal surface against corrosion in a molecular-oxygen containing atmosphere containing in the range from 1 to 100 ppm of an acid gas at a relative humidity of 90% and 37.4°C (100°F), when the ferrous metal surface is exposed in generally spaced apart relationship with the composition in a sealed environment, the composition comprising: a substantially non-hydrolyzable synthetic resinous polymer that is a biodegradable polymer having dispersed therein from 0.01% to 2% by weight of each of an interceptor comprising an alkali **[[meta]]** <u>metal</u> silicate, or zinc oxide, or both, from 0.01% to 2% by weight of sodium nitrite, and from 0.01% to 2% by weight of a 2,4,6-trisubstituted phenol, and less than 1% by weight of an adjuvant, provided that the polymer has a water vapor transmission rate (WVTR) at least as high as that of low density polyethylene.

27. (Previously Presented) The corrosion inhibiting composition of claim 26, wherein said alkali metal silicate is sodium silicate, wherein said biodegradable polymer comprises a star ε-caprolactone, ε-caprolactone (ε-PCL); poly(hydroxybutyrate-co-valerate) (PHBV); uncoated- or nitrocellulose-coated cellophane film; crosslinked

chitosan; starch/ethylene vinyl alcohol (St/VOH) blend film; pure ethylene vinyl alcohol film; and polycaprolactone (PCL).

28. (Previously Presented) The corrosion inhibiting composition of claim 27, wherein said biodegradable polymer is a star ε-caprolactone, ε-caprolactone (ε-PCL), or poly-caprolactone (PCL).

29. (Previously Presented) The corrosion inhibiting composition of claim 27, wherein the adjuvant comprises fumed silica or calcium carbonate.

30. (Previously Presented) The corrosion inhibiting composition of claim 26, wherein the amount of each of said alkali metal silicate or said zinc oxide, or both, is from 0.05% to 1% by weight, wherein the amount of said sodium nitrite is from 0.05% to 1% by weight, wherein the amount of said trisubstituted phenol is from 0.05% to 1% by weight, and wherein the amount of said adjuvant is from 0.01% to 1% by weight.

31. (Previously Presented) The corrosion inhibiting composition of claim 29, wherein the amount of each of said alkali metal silicate or said zinc oxide, or both, is from 0.05% to 1% by weight, wherein the amount of said sodium nitrite is from 0.05% to 1% by weight, wherein the amount of said trisubstituted phenol is from 0.05% to 1% by weight, and wherein the amount of said adjuvant is from 0.01% to 1% by weight.

32. – 37. (Cancelled).

38. (Previously Presented) The corrosion inhibiting composition of claim 30, wherein the alkali metal silicate and said zinc oxide, independently, has a primary particle size of from about 1 to 53 microns and are substantially homogeneously dispersed in the polymer, wherein said sodium nitrite has a primary particle size of from

about 1 to 53 microns and is substantially homogeneously dispersed in the polymer, and wherein said adjuvant has a particle size of less than 1 micron.

39. (Previously Presented) The corrosion inhibiting composition of claim 31, wherein the alkali metal silicate and said zinc oxide, independently, has a primary particle size of from about 1 to 53 microns and are substantially homogeneously dispersed in the polymer, wherein said sodium nitrite has a primary particle size of from about 1 to 53 microns and is substantially homogeneously dispersed in the polymer, and wherein the particle size of said fumed silica and said calcium carbonate, independently, is less than 1 micron.

40. (Previously Presented) A concentrate adapted to be diluted with a non-biodegradable polymer diluent to produce a corrosion inhibiting composition effective to protect a ferrous metal surface against corrosion in a molecular-oxygen containing atmosphere containing in the range from 1 to 100 ppm of an acid gas at a relative humidity of 90% and 37.4°C (100°F), when the ferrous metal surface is exposed in generally spaced apart relationship with the composition in a sealed environment, the concentrate comprising a substantially non-hydrolyzable synthetic resinous polymer that is non-biodegradable having dispersed therein from 10 to about 40 parts of an interceptor comprising an alkali metal silicate, or zinc oxide, or both, from 10 to 40 parts of sodium nitrite, and from 10 to 40 parts of a 2,4,6-tri substituted phenol, in combination with an adjuvant present in less than 5 parts, provided that the resinous polymer has a water vapor transmission rate (WVTR) at least as high as that of low density polyethylene and is present in an amount of at least 40 parts in 100 parts of the concentrate.

41. (Previously Presented) A concentrate of claim 40, wherein said alkali metal silicate is sodium silicate, and wherein said concentrate non-biodegradable polymer comprises low density polyethylene, polypropylene, copolymer of lower C_2–C_8 olefin,

copolymer of lower C_2–C_8 olefin and ethylene/vinyl alcohol, ethylene/vinyl acetate, non-biodegradable polyester, polycarbonate, polyurethane, polybutene, poly(vinyl chloride), polystyrene, or polyamide.

42. (Previously Presented) The concentrate of claim 41, wherein said non-biodegradable diluent polymer comprises low density polyethylene, polypropylene, copolymer of lower C_2–C_8 olefin, copolymer of lower C_2–C_8 olefin and ethylene/vinyl alcohol, ethylene/vinyl acetate, non-biodegradable polyester, polycarbonate, polyurethane, polybutene, poly(vinyl chloride), polystyrene, or polyamide, wherein the adjuvant comprises fumed silica or calcium carbonate, and wherein the interceptor and the sodium nitrite have a primary particle size, independently, in the range from about 1 μm to 53 μm and are substantially homogeneously dispersed in the polymer.

43. (Previously Presented) A composition comprising the concentrate of claim 40, and said non-biodegradable diluent polymer, said composition comprising:

from 0.01% to 2% by weight of each of said alkali metal silicate or said zinc oxide, or both;

from 0.01 % to 2% by weight of said sodium nitrite; and

from 0.01% to 2% by weight of said trisubstituted phenol.

44. (Previously Presented) A composition comprising the concentrate of claim 42, and said non-biodegradable diluent polymer, said composition comprising:

from 0.01% to 2% by weight of each of said alkali metal silicate, or said zinc oxide, or both;

from 0.01 % to 2% by weight of said sodium nitrite; and

from 0.01% to 2% by weight of said trisubstituted phenol.

45. (Previously Presented) The composition of claim 43, wherein the particle size of said alkali metal silicate or said zinc oxide, independently, is from 1 to 45

microns, wherein the particle size of said sodium nitrite is from 1 to 45 microns, and wherein the particle size of said adjuvant is less than 1 micron.

46. (Previously Presented) The composition of claim 44, wherein the particle size of said alkali metal silicate or said zinc oxide, independently, is from 1 to 45 microns, wherein the particle size of said sodium nitrite is from 1 to 45 microns, and wherein the particle size of said fumed silica or calcium carbonate is less than 1 micron.

47. (Previously Presented) A corrosion inhibiting composition effective to protect a ferrous metal surface against corrosion in a molecular-oxygen containing atmosphere containing in the range from 1 to 100 ppm of an acid gas at a relative humidity of 90% and 37.4°C (100°F), when the ferrous metal surface is exposed in generally spaced apart relationship with the composition in a sealed environment, the composition comprising: a substantially non-hydrolyzable synthetic resinous polymer that is a non-biodegradable polymer having dispersed therein from 0.01% to 2% by weight of each of an interceptor comprising an alkali metal silicate, or zinc oxide, or both, from 0.01% to 2% by weight of sodium nitrite, and from 0.01% to 2% by weight of a 2,4,6-trisubstituted phenol, and less than 1% by weight of an adjuvant, provided that the polymer has a water vapor transmission rate (WVTR) at least as high as that of low density polyethylene.

48. (Previously Presented) The corrosion inhibiting composition of claim 47, wherein said alkali metal silicate is sodium silicate, wherein said non-biodegradable polymer comprises low density polyethylene, polypropylene, copolymer of lower C_2 –C_8 olefin, copolymer of lower C_2 –C_8 olefin and ethylene/vinyl alcohol, ethylene/vinyl acetate, polycarbonate, polyurethane, polybutene, poly(vinyl chloride), polystyrene, or polyamide.

49. (Previously Presented) The corrosion inhibiting composition of claim 48, wherein said non-biodegradable polymer is low density polyethylene, or ethylene/vinyl acetate copolymer.

50. (Previously Presented) The corrosion inhibiting composition of claim 48, wherein the adjuvant comprises fumed silica or calcium carbonate.

51. (Previously Presented) The corrosion inhibiting composition of claim 47, wherein the amount of each of said alkali metal silicate or said zinc oxide, or both, is from 0.05% to 1% by weight, wherein the amount of said sodium nitrite is from 0.05% to 1% by weight, wherein the amount of said trisubstituted phenol is from 0.05% to 1% by weight, and wherein the amount of said adjuvant is from 0.01% to 1% by weight.

52. (Previously Presented) The corrosion inhibiting composition of claim 50, wherein the amount of each of said alkali metal silicate or said zinc oxide, or both, is from 0.05% to 1% by weight, wherein the amount of said sodium nitrite is from 0.05% to 1% by weight, wherein the amount of said trisubstituted phenol is from 0.05% to 1% by weight, and wherein the amount of said adjuvant is from 0.05% to 1% by weight.

53. (Previously Presented) The corrosion inhibiting composition of claim 51, wherein the alkali metal silicate and said zinc oxide, independently, has a primary particle size of from about 1 to 53 microns and are substantially homogeneously dispersed in the polymer, wherein said sodium nitrite has a primary particle size of from about 1 to 53 microns and is substantially homogeneously dispersed in the polymer, and wherein said adjuvant has a particle size of less than 1 micron.

54. (Previously Presented) The corrosion inhibiting composition of claim 52, wherein the alkali metal silicate and said zinc oxide, independently, has a primary particle size of from about 1 to 53 microns and are substantially homogeneously

dispersed in the polymer, wherein said sodium nitrite has a primary particle size of from about 1 to 53 microns and is substantially homogeneously dispersed in the polymer, and wherein said adjuvant has a particle size of less than 1 micron.